

Appl. No. 09/828,715
Response Dated November 10, 2006
Reply to Office Action of June 15, 2006

LISTING OF THE CLAIMS

This listing of the claims will replace all prior versions and listings of claims in the application.

1-99. Canceled.

100. (Currently Amended) A five layer stitchless seam comprising a first thermoplastic tape portion, a first substrate portion in contact with said first thermoplastic tape portion, a second thermoplastic tape portion in contact with said first substrate portion, a second substrate portion in contact with said second thermoplastic tape portion, and a third thermoplastic tape portion in contact with said second substrate portion to provide a flexible stitchless seam between the five layers, wherein at least one of said first thermoplastic tape portion, said second thermoplastic tape portion, and said third thermoplastic tape portion is a multi-layer tape portion that runs the length of the seam and includes a first continuous layer having a first melting point and a second continuous layer having a second melting point.

101. (Previously Presented) The seam of claim 100, wherein at least two of the tape portions are contiguous.

102. Canceled.

103. (Previously Presented) The seam of claim 100, wherein at least two of said tape portions and said substrate portions are the same materials.

104. (Previously Presented) The seam of claim 100, wherein the first substrate portion and the second substrate portion are different materials.

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105. (Previously Presented) The seam of claim 100, wherein at least one of the substrate portions comprises a barrier layer.

106. (Previously Presented) The seam of claim 105, wherein at least one of the substrate portions comprises a fabric.

107. (Previously Presented) The seam of claim 105, wherein both the first substrate portion and the second substrate portion comprise a fabric.

108. (Currently Amended) The seam of claim 100, wherein at least four areas of the first and second substrate portions are bonded in a cross-sectional area of the seam and wherein the seam has a strength greater than a double felled needle sewn seam made with the same substrates.

109. (Previously Presented) The seam of claim 100, wherein at least four areas of the first and second substrate portions are bonded in a cross-sectional area of the seam and wherein the tensile grab strength is at least about 85kg.

110. (Previously Presented) The seam of claim 100, wherein the tensile grab strength is at least about 114 kg.

111. (Previously Presented) The seam of claim 100, wherein the tensile grab strength is at least 135 about kg.

112. (Previously Presented) The seam of claim 100, wherein the tensile grab strength is at least about 150 kg.

113. (Previously Presented) The seam of claim 100, wherein the seam is a welded seam.

114. (Currently Amended) A multilayer stitchless seam comprising a connecting bond formed between at least a first substrate and a second substrate and at least a

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first tape portion, a second tape portion, and a third tape portion, wherein the stitchless seam is a welded seam having a seam width, wherein the first substrate comprises a surface ~~is contacted by~~ that is bonded to the first tape portion across a ~~bonding~~ width that is ~~greater than~~ equivalent to the seam width plus a first additional width such that the width of the first tape portion that is bonded to the first substrate surface is greater than the seam width, wherein the first additional width is at least 1.6 millimeters.

115. (Currently Amended) The multilayer stitchless seam of claim 114, wherein the ~~bonding~~ first additional width is greater than twice the seam width.

116. Cancelled.

117. (Currently Amended) The multilayer stitchless seam of claim 114, wherein at least four areas of the first and second substrates are bonded in a cross-sectional area of the seam and wherein the seam has a strength greater than a double felled needle sewn seam made from the same substrates.

118. (Previously Presented) The multilayer stitchless seam of claim 114, wherein at least four areas of the first and second substrates are bonded in a cross-sectional area of the seam and wherein the tensile grab strength is at least about 85kg.

119. (Previously Presented) The multilayer stitchless seam of claim 114, wherein the tensile grab strength is at least about 114 kg.

120. (Previously Presented) The multilayer stitchless seam of claim 114, wherein the tensile grab strength is at least 135 about kg.

121. (Previously Presented) The multilayer stitchless seam of claim 114, wherein the tensile grab strength is at least about 150 kg.

122. Cancelled.

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123. (Currently Amended) A multilayer stitchless seam comprising a first tape portion, a first substrate portion in contact with said first tape portion, a second tape portion in contact with said first substrate portion, a second substrate portion in contact with said second tape portion, and a third tape portion in contact with said second substrate portion to provide a flexible seam between the layers, wherein at least one of the first substrate and the second substrate is a composite substrate comprising at least two layers.

124. (Previously Presented) The multilayer stitchless seam of claim 123, further comprising a third substrate portion.

125. (Previously Presented) The multilayer stitchless seam of claim 123, wherein the seam is a welded seam.